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BEYER WEAVER & THOMAS LLP
P.O. BOX 70250
OAKLAND, CA 94612-0250

EXAMINER

NALVEN, ANDREW L

ART UNIT PAPER NUMBER

2134

DATE MAILED: 06/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/732,650

Applicant(s)

NGUYEN, BINH T.

Examiner

Andrew L. Nalven

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-50 are pending.
2. Amendment submitted 23 May 2005 has been entered.

Response to Arguments

3. Applicant's arguments with respect to claims 1-50 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-5, 8, 11-18, 20, 25-32, 38-40, 43-46, 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weiss et al US Patent No. 6,364,769 in view of Ahmad US Patent No 5,925,127 and Bruce Schneier's Applied Cryptography.

6. With regards to claims 1 and 32, Weiss teaches providing a gaming machine comprising a housing (Weiss, column 6 lines 15-22), a master gaming controller coupled to the housing that controls a game of chance played on the gaming machine and determines the outcome of the game of chance (Weiss, column 6 lines 25-39,

random gaming outcomes), a first input mechanism coupled to the housing for receiving and storing money or indicia of credit input to the gaming machine (Weiss, column 6 lines 40-50, coin acceptor, column 7 lines 53-65), an output mechanism coupled to the housing for outputting money or tangible indicia of credit redeemable for cash from the gaming machine resulting from outcomes determined on the gaming machine (Weiss, column 6 lines 40-50, cash out), under control of the master gaming controller performing one or more gaming transactions on the gaming machine wherein the one or more gaming transactions include at least determining an amount of money or indicia of credit input to the gaming machine or determining an amount of money or indicia to output from the gaming machine (Weiss, column 6 lines 40-50, column 7 lines 20-30), under control of the master gaming controller storing gaming transaction data generated from said one or more gaming transactions to non-volatile memory (Weiss, column 7 lines 30-39), under control of the master gaming controller, after determining the amount of money or indicia of credit input into the gaming machine, receiving a wager on a game of chance using the money or indicia of credit input into the gaming machine (Weiss, column 8 lines 1-14), and under control of the master gaming controller, determining the outcome for the game of chance and displaying the outcome to the game of chance (Weiss, column 8 line 59 – column 9 line 5). Weiss fails to teach symmetrically encrypting gaming transaction data and sending the gaming transaction data using asymmetric encryption to a remote server. Ahmad teaches sending a message including the gaming transaction data to one or more remote servers (Ahmad, column 8 lines 54-64). Schneier teaches the symmetrical encrypting of data (Schneier,

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Page 515 "Key Exchange Without Exchanging Keys", Pages 513-514 "Diffie-Hellman"), the asymmetrical encrypting of the symmetric encryption key using a public encryption key (Schneier, Page 515 "Key Exchange Without Exchanging Keys", Pages 513-514 "Diffie-Hellman"), and the sending of the encrypted symmetric encryption key to one or more remote servers (Schneier, Page 515 "Key Exchange Without Exchanging Keys", Pages 513-514 "Diffie-Hellman"). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize Ahmad's method of sending data to a remote server and Schneier's encryption method because they offer the advantage of increased security by allowing the exchanging of a secret key on a communications channel while preventing other users from listening in and determining the value of the secret key (Schneier, Page 514, Paragraph 3) and because they offer the advantage of allowing a remote server to monitor the actions of a client and ensure proper use of software on the client (Ahmad, column 2 lines 50-67).

7. With regards to claims 11 and 25, Weiss teaches all that is described above with regards to claim 1, but fails to teach the requesting and receiving of license data.

Ahmad teaches the generating of game license request data and a game license request message (Ahmad, column 1 lines 15-18 and 25-30, column 8 line 54 – column 9 line 37), and sending a game license request message to a remote server (Ahmad, column 8 lines 54-64), receiving a game license reply message from the remote server (Ahmad, column 9 lines 38-48), and updating the license data on the gaming machine when the message includes a game license (Ahmad, column 9 lines 38-48, column 10 lines 32-34). Schneier teaches the symmetrical encrypting of data (Schneier, Page 515

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"Key Exchange Without Exchanging Keys", Pages 513-514 "Diffie-Hellman"), the asymmetrical encrypting of the symmetric encryption key using a public encryption key (Schneier, Page 515 "Key Exchange Without Exchanging Keys", Pages 513-514 "Diffie-Hellman"), and the sending of the encrypted symmetric encryption key to one or more remote servers (Schneier, Page 515 "Key Exchange Without Exchanging Keys", Pages 513-514 "Diffie-Hellman"). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize Schneier's encryption method and Ahmad's licensing method with Weiss' gaming system because they offer the advantage of increased security by allowing the exchanging of a secret key on a communications channel while preventing other users from listening in and determining the value of the secret key (Schneier, Page 514, Paragraph 3) and because they offer the advantage of ensuring that a machine is operating a program that it is entitled to operate and preventing a rogue system from using stolen or compromised software (Ahmad, column 2 lines 50-67).

8. With regards to claims 2 and 12, Weiss as modified teaches the contacting of a local ISP and sending the message via the local ISP (Ahmad, Figures 1 and 2).

9. With regards to claims 3, 13 and 30, Weiss as modified teaches the looking up one the address of one of the remote servers (Ahmad, column 12 lines 15-19).

10. With regards to claims 4 and 14, Weiss as modified teaches the encapsulating of encrypted transaction data and the encrypted symmetric key in multiple information packets (Schneier, Page 515 "Key Exchange Without Exchanging Keys", Pages 513-

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514 "Diffie-Hellman", Ahmad, column 8 line 54 – column 9 line 37, column 7 lines 18-45).

11. With regards to claims 5 and 15, Weiss as modified teaches the generating of a message signature allowing the message to be unambiguously identified as being from the gaming machine and appending the message signature to the message (Schneier, Page 37, "Signing Documents with Public-Key Cryptography"). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize Schneier's method of signing messages because it offers the advantage assuring the receiver that the message is valid and allows validation of the source of the message (Schneier, Page 37, "Signing Documents with Public-Key Cryptography").

12. With regards to claims 8 and 40 (as best understood), Weiss as modified teaches the gaming transaction data being accounting data, game usage data, game configuration data, software version data, a casino identification, machine status data, a time stamp, service priority data, licensing information, billing data, diagnostic data, and maintenance data (Ahmad, column 8 line 54 – column 9 line 44).

13. With regards to claims 16, 27 and 46, Weiss as modified teaches the game license data being symmetrically encrypted using a symmetric encryption key and the symmetric encryption key being encrypted using a public key (Schneier, Page 37, "Signing Documents with Public-Key Cryptography", Ahmad, Ahmad, column 1 lines 15-18 and 25-30, column 8 line 54 – column 9 line 37).

14. With regards to claim 17, Weiss as modified teaches the game license data including a license expiration data (Ahmad, column 10 lines 21-27), a game ID number

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(Ahmad, column 9 lines 38-42, column 10 lines 21-27), game usage data (Ahmad, column 9 lines 1-5), software version data (Ahmad, column 9 lines 10-15), operator identification data (Ahmad, column 10 lines 21-27), time data (Ahmad, column 9 lines 1-5), date data (Ahmad, column 9 lines 1-5), and machine identification information (Ahmad, column 10 lines 54-59).

15. With regards to claims 18 and 29, Weiss as modified teaches the authenticating of the game license reply message (Ahmad, column 10 lines 50-67).

16. With regards to claims 19 and 37, Weiss as modified teaches the game being played being video slot, lottery, poker, blackjack, or pachinko (Weiss, column 6 lines 15-22).

17. With regards to claim 20, Weiss as modified teaches the choosing of a game license selected from the group of a site license, an annual license, a monthly license, a daily license, or a per-use license (Ahmad, column 8 line 65 – column 9 line 10).

18. With regards to claim 26, Weiss as modified teaches the determining of a gaming machine owner (Ahmad, column 8 lines 54-58), generating a billing request message (Ahmad, column 8 lines 58-60), and sending the billing request message to the gaming machine owner (Ahmad, column 8 lines 54-64).

19. With regards to claim 28, Weiss as modified teaches the storing of the license request data (Ahmad, column 8 lines 60-64) and the license reply data (Ahmad, column 9 lines 45-51).

20. With regards to claims 31 and 38, Weiss as modified teaches the symmetric key included in the game license request data being decrypted using a private key and a

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game license request data being decrypted using the symmetric key (Schneier, Page 37, "Signing Documents with Public-Key Cryptography", Ahmad, Ahmad, column 1 lines 15-18 and 25-30, column 8 line 54 – column 9 line 37).

21. With regards to claim 39, Weiss as modified teaches the memory selected from the group consisting of an EEPROM, flash memory, ROM, RAM, CD DVD, tape drive, hard drive, and non-volatile memory (Ahmad, column 6 lines 45-67).

22. With regards to claim 43, Weiss as modified teaches the remote server being selected from the group consisting of a game license server, a report server, a public key server, a game server, a software update server, a diagnostic server, a billing server, a gaming machine, and a maintenance server (Ahmad, column 8 line 54 – column 9 line 44).

23. With regards to claim 44, Weiss as modified teaches the memory storing IP addresses of one or more of the remote servers (Ahmad, column 12 lines 15-19, Figure 2).

24. With regards to claims 45 and 48, Weiss as modified teaches the memory storing a private key for decrypting encrypted data (Schneier, Page 37, "Signing Documents with Public-Key Cryptography").

25. Claims 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weiss et al US Patent No. 6,364,769 in view Ahmad US Patent No 5,925,127, Bruce Schneier's Applied Cryptography, and Peterson et al US Patent No 6,052,512.

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26. With regards to claim 21, Weiss teaches all that is described above with regards to claim 1, but fails to teach the sending of encrypted gaming transaction data to a remote server and the requesting of gaming report data. Ahmad teaches sending a message including the gaming transaction data to one or more remote servers (Ahmad, column 8 lines 54-64) and receiving a gaming transaction reply message from the remote server (Ahmad, column 9 lines 38-44). Schneier teaches the symmetrical encrypting of data (Schneier, Page 515 "Key Exchange Without Exchanging Keys", Pages 513-514 "Diffie-Hellman"), the asymmetrical encrypting of the symmetric encryption key using a public encryption key (Schneier, Page 515 "Key Exchange Without Exchanging Keys", Pages 513-514 "Diffie-Hellman"), and the sending of the encrypted symmetric encryption key to one or more remote servers (Schneier, Page 515 "Key Exchange Without Exchanging Keys", Pages 513-514 "Diffie-Hellman"). Peterson teaches the requesting of report data regarding games (Peterson, column 12 lines 32-38, Figure 2) and the displaying of the report data after receiving a response to the request (Peterson, column 12 lines 8-9). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize Ahmad's remote server method, Schneier's encryption method, and Peterson's method of requesting and displaying report data with Weiss' gaming system because they offer the advantage of increased security by allowing the exchanging of a secret key on a communications channel while preventing other users from listening in and determining the value of the secret key (Schneier, Page 514, Paragraph 3), because they offer the advantage of allowing the evaluation of the performance of a user of the system

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(Peterson, column 2 lines 3-15), and because they offer the advantage of ensuring that a machine is operating a program that it is entitled to operate and preventing a rogue system from using stolen or compromised software (Ahmad, column 2 lines 50-67).

27. With regards to claims 22 and 23, Weiss as modified teaches the contacting of a local ISP and sending the message via the local ISP (Ahmad, Figures 1 and 2, Peterson Figure 2).

28. With regards to claims 24, Weiss as modified teaches the looking up one the address of one of the remote servers (Ahmad, column 12 lines 15-19).

29. Claim 6-7, 38, 41-42, and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weiss et al US Patent No. 6,364,769, Ahmad US Patent No 5,925,127, and Bruce Schneier's Applied Cryptography, as applied to claims 1 and 32 above, and further in view of Peterson et al US Patent No 6,052,512.

30. With regards to claims 6 and 38, Weiss as modified fails to teach the determining if an acknowledgement message is received and resending if not. Peters teaches the use of the TCP/IP protocol (Peterson, column 16 lines 31-33). The TCP protocol includes acknowledgement messages and resends messages when acknowledgements aren't received. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize Petersons's method of acknowledging messages because it offers the advantage of ensuring the proper delivery of a message.

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31. With regards to claim 7, Weiss as modified teaches the remote server selected between a license server Ahmad, column 1 lines 15-18 and 25-30, column 8 line 54 – column 9 line 37), but fails to teach the remote server being a report server. Peterson teaches the remote server being a report server (Peterson, column 12 lines 32-38, Figure 2). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to include Peterson's report server because it offers the advantage of allowing the evaluation of the performance of a user of the system (Peterson, column 2 lines 3-15).

32. With regards to claims 41 and 47, Weiss as modified teaches the gaming transaction request/reply being a game license request/reply, a report request/reply, a maintenance request/reply, a software version request/reply, a billing request/reply, a digital signature request/reply, an identification request/reply, a fund transfer request/reply, a configuration request/reply, and a diagnostic request/reply (Ahmad, column 8 line 54 – column 9 line 44, Peterson, column 12 lines 32-38).

33. With regards to claim 42, Weiss as modified teaches the displaying of a report received in reply to a report request (Peterson, column 12 lines 8-9). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize Peterson's method of requesting and displaying report data because it offers the advantage of allowing the evaluation of the performance of a user of the system (Peterson, column 2 lines 3-15).

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34. Claims 9-10 and 49-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weiss et al US Patent No. 6,364,769, Ahmad US Patent No 5,925,127, and Bruce Schneier's Applied Cryptography, as applied to claims 1 and 32 above, and further in view of Boesch US Patent No 6,125,185.

35. With regards to claims 9-10 and 49-50, Weiss as modified fails to teach the selecting of a symmetric encryption key from a pool of keys and the encrypting of the first transaction data with a first symmetric encryption key and a second transaction data with a second encryption key. Boesch teaches the selecting of a symmetric encryption key from a pool of keys and the encrypting of the first transaction data with a first symmetric encryption key and a second transaction data with a second encryption key (Boesch, column 5 lines 1-21, column 4 lines 2-5). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize Boesch's method of choosing from a pool of symmetric keys and encrypting each transaction with a new key because it offers the advantage of reducing the risk of having sensitive information compromised (Boesch, column 1 lines 13-23) and helps level demands on computational resources by having encryption keys ready for use prior to their actual need (Boesch, column 3 lines 42-47).

36. Claims 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weiss et al US Patent No. 6,364,769, Ahmad US Patent No 5,925,127, and Bruce Schneier's Applied Cryptography, as applied to claim 32 above, and further in view of LaDue US Patent No 5,99,808. LaDue teaches a wireless gaming method.

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37. With regards to claim 33, Weiss as modified teaches the network interface being a wire line interface but fails to teach the interface being a wireless interface. LaDue teaches the use of a wireless network interface (LaDue, column 7 lines 17-39). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize LaDue's method of communication because it offers the advantage of allowing a player to participate in a game from a remote location wirelessly (LaDue, column 2 lines 1-8).

38. With regards to claim 34, Weiss as modified fails to teach the use of an antenna for transmitting and receiving communications over the wireless interface. LaDue teaches the use of an antenna for transmitting and receiving communications over the wireless interface (LaDue, column 7 lines 17-39, Figure 1B).

39. With regards to claim 35, Weiss as modified fails to teach the use of a modem for transmitting wirelessly or by wire line. LaDue teaches the use of a modem (LaDue, column 11 lines 38-42).

40. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Weiss et al US Patent No. 6,364,769, Ahmad US Patent No 5,925,127, and Bruce Schneier's Applied Cryptography, as applied to claim 32 above, and further in view of Colosso US Patent No 6,169,976. Colosso teaches a method and apparatus for regulating the use of licensed software.

41. With regards to claim 36, Weiss as modified teaches a firewall for filtering communications received at the network interface (Colosso, column 7 line 66 – column

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8 line 6). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize Colosso's method of using a firewall because it offers the advantage of preventing unauthorized clients from connecting to servers behind the firewall (Colosso, column 8 lines 4-6).


Conclusion

42. Any inquiry concerning this communication or earlier communications from the examiner should be directed to whose telephone number is 571 272 3839. The examiner can normally be reached on Monday - Thursday 8-6, Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse can be reached on 571 272 3838. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Andrew Nalven



GREGORY MORSE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100